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### Economic Commission for Europe

#### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

Joint Meeting of Experts on the Regulations annexed to the  
European Agreement concerning the International Carriage  
of Dangerous Goods by Inland Waterways (ADN)  
(ADN Safety Committee)

Twenty-fifth session  
Geneva, 25–29 August 2014

### **Report of the Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN Safety Committee) on its twenty-fifth session<sup>1</sup>**

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<sup>1</sup> Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/52.

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## **I. Attendance**

1. The Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee) held its twenty-fifth session in Geneva from 25 to 29 August 2014, with Mr. H. Rein (Germany) as Chairperson and Mr. B. Birkhuber (Austria) as Vice-Chairperson. Representatives of the following countries took part in the work of the session: Austria, Belgium, Bulgaria, Croatia, France, Germany, Luxembourg, Netherlands, Romania, Serbia, Slovakia, Switzerland and Ukraine. The following intergovernmental organizations were represented: Central Commission for the Navigation of the Rhine (CCNR), Danube Commission (CD) and European Union. The following non-governmental organizations were also represented: European Association for Coal and Lignite (EURACOAL), European Barge Union (EBU), European Chemical Industry Council (CEFIC), European Petroleum Industry Association (EUROPIA), International Committee for the Prevention of Work Accidents in Inland Navigation (CIPA), International Dangerous Goods and Containers Association (IDGCA) and recommended ADN classification societies.

## **II. Adoption of the agenda (agenda item 1)**

*Documents:* ECE/TRANS/WP.15/AC.2/51 and Add.1

*Informal document:* INF.1/Rev.1 (Secretariat)

2. The Safety Committee adopted the agenda prepared by the secretariat as amended by informal document INF.1/Rev.1 to take account of informal documents INF.1 to INF.23.

## **III. Matters arising from the work of United Nations bodies or other organizations (agenda item 2)**

3. Matters arising from the work of the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods, Working Party on the Transport of Dangerous Goods and RID/ADR/ADN Joint Meeting were dealt with under agenda item 4.

## **IV. Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (agenda item 3)**

### **A. Status of ADN**

4. The Safety Committee noted that no new depositary notifications had been filed and that the number of Contracting Parties thus remained at 17.

### **B. Special authorizations, derogations and equivalents**

#### **1. Multilateral agreements**

5. The Safety Committee noted that, since the last session, a new agreement (M 011) on the use of flame arresters had been introduced by Germany and signed by Austria, France, Germany and the Netherlands.

**2. Use of diesel and liquefied natural gas as fuel for the vessel *Eiger***

*Informal document:* INF.3 (Netherlands)

6. The Safety Committee recommended that the Administrative Committee should adopt a decision on a derogation for the vessel *Eiger* on the basis of the proposed derogation with amendments.

**3. Use of membrane tanks for the transport of liquefied natural gas on the tank vessel *Argos-GL***

*Informal document:* INF.11 (Netherlands)

7. The Safety Committee was of the opinion that the proposed derogation required further consideration and invited the Netherlands to organize a meeting of a technical expert group, to look, in particular, at the issues raised concerning the behaviour of the substance in the tanks, for example, when the tank was not completely full, and its effects on the vessel's stability, the stability and integrity of the tanks, and the requirements for electrical equipment in the tanks.

**C. Interpretation of the Regulations annexed to ADN****1. Submerged motors for LNG systems on inland navigation vessels**

*Document:* ECE/TRANS/WP.15/AC.2/2014/30 (Belgium)

8. The Safety Committee confirmed that the use of submerged electric motors in the cargo tanks of type G tanker vessels was prohibited in 9.3.1.52.1 of the Regulations annexed to ADN; it was, therefore, also prohibited when LNG was transported in those tanks.

**2. CONCAWE study entitled "HFO Emissions and Exposure"**

*Informal document:* INF.9 (EUROPIA)

9. The Safety Committee noted the progress made in the work of CONCAWE on assessing emissions during the loading of heavy fuel oils (see also ECE/TRANS/WP.15/AC.2/46, para. 16).

**3. New transitional provision in 1.6.8 concerning the training of operators of vessels carrying LNG**

*Document:* ECE/TRANS/WP.15/AC.2/2014/33 (Germany)

10. The Safety Committee recommended that the responsible master referred to under the transitional provision, effective 1 January 2015, would be provided with a certificate attesting to his or her attendance of a specialization course on gas issued by a training institution approved by the competent ADN authority. However, the Safety Committee confirmed that, under the current provisions, completion of such training did not entail passing an examination.

## **D. Training of experts**

### **Report of the twelfth meeting of the informal working group on the training of experts**

*Document:* ECE/TRANS/WP.15/AC.2/2014/49 (CCNR)

11. The Safety Committee noted the report of the group, including the progress made on the continuous alignment of the ADN 2015 catalogue of questions (part III, section A, of the document).

12. The Safety Committee invited all ADN Contracting Parties to provide the working group with the criteria used in granting recognition of training in accordance with 8.2.

13. Regarding the form of the expert certificate under 8.2, the Safety Committee was of the view that the same procedure should be followed as had been for ADR. The Contracting Parties were asked first to submit their model expert certificates to the ECE secretariat in the form in which they were currently issued and the secretariat would make them available on the ADN web pages of the ECE website. Germany would prepare a paper for discussion in the informal working group on the proper form that these certificates might take in future.

14. The ADN Contracting Parties were invited to share their statistics on examinations.

## **E. Matters related to classification societies**

### **1. References in ADN to the rules and regulations of classification societies**

*Informal document:* INF.12 (Austria, Germany, Netherlands, Switzerland)

15. The Safety Committee took up the request for recommended ADN classification societies to verify whether they had class rules and standards for class approval on the various provisions of ADN mentioned in the document.

### **2. Minutes of the seventh meeting of the recommended ADN classification societies**

*Informal document:* INF.13 (Recommended ADN classification societies)

16. The Safety Committee noted with interest the outcome of the meeting of recommended ADN classification societies.

17. The Safety Committee reiterated its request that recommended ADN classification societies should maintain a list of any interpretations of ADN which they had agreed on (see ECE/TRANS/WP.15/AC.2/40, para. 49) which should be published on the UNECE website.

18. With regard to a comment concerning how various groups established by the Safety Committee were named, a member of the ECE secretariat indicated that the phrase “informal groups” simply indicated that the groups in question, even those with a mandate from the Safety Committee, could not enjoy the services of the ECE secretariat, as they had not been approved by the ECE Executive Committee (EXCOM) in budgetary terms. They could contribute to the work of the Safety Committee only if there were no financial implications for the ECE secretariat.

19. It was recalled that recommended ADN classification societies must provide evidence of their certification in accordance with standard EN ISO/IEC 17020:2012 (with the exception of section 8.1.3) to the ADN Administrative Committee; otherwise they could be removed from the list of recommended ADN classification societies.

**3. Application of RINA Services S.P.A., Genoa, Italy, for inclusion on the list of classification societies recommended by the ADN Administrative Committee**

*Document:* ECE/TRANS/WP.15/AC.2/2014/36 (Germany)

20. The representative of Germany stated that the Committee of Experts had received additional information from Registro Italiano Navale (RINA) since the document had been submitted, and that it was in a position to recommend the inclusion of RINA on the list. Documents submitted by RINA had been examined by the Committee of Experts during the session. The Safety Committee therefore invited the Administrative Committee to add RINA to the list.

**4. Application of Det Norske Veritas Germanischer Lloyd SE (DNV GL SE)**

*Document:* ECE/TRANS/WP.15/AC.2/2014/37 (Germany)

21. The Safety Committee noted that recommended society Germanischer Lloyd had merged with Det Norske Veritas to form a European Company (also known as a *Societas Europaea* (SE)) and that it should therefore be removed from the list. It also agreed, on the basis of information provided by Germany, to recommend that the Administrative Committee should add DNV GL SE to the list of recommended societies.

## **IV. Proposals for amendments to the Regulations annexed to ADN (agenda item 4)**

### **A. Work of the RID/ADR/ADN Joint Meeting**

*Documents:* ECE/TRANS/WP.15/AC.1/134 and Add.1 and Add.2 (Secretariat)  
 ECE/TRANS/WP.15/224 (Secretariat)  
 ECE/TRANS/WP.15/222/Add.1 (Secretariat)  
 ECE/TRANS/WP.15/222/Add.1/Corr.1 (Secretariat)  
 ECE/TRANS/WP.15/222/Corr.1 (Secretariat)  
 ECE/TRANS/WP.15/222/Corr.2 (Secretariat)  
 ECE/TRANS/WP.15/AC.2/2014/35 (Secretariat)  
 ECE/ADN/27 (Secretariat)

22. The Safety Committee adopted amendments that it considered necessary for harmonization with the amendments to RID and ADR which were scheduled to enter into force on 1 January 2015 (ECE/TRANS/WP.15/AC.2/2014/35), with some modifications (see annex I).

23. Regarding the extension of the exemptions in 1.1.3.7 to equipment other than lithium batteries, e.g. fuel cells, the Safety Committee agreed that it should, in the future, be established to what extent such exemptions could be applied to equipment on board a vessel, given the provisions of Part 7.

## **B. Other proposals**

### **1. Corrections to the proposed amendments in ECE/ADN/27**

*Document:* ECE/TRANS/WP.15/AC.2/2014/29 (CCNR)

*Informal documents:* INF.16 and INF.19 (Germany)  
INF.22 (EBU)

24. The Safety Committee adopted some proposed corrections to document ECE/ADN/27 (see ECE/ADN/27/Corr.1) related to errors or omissions in consequential amendments (see annex II). The Committee considered that the errors or omissions should be corrected as soon as the amendments concerned came into force, and therefore suggested that the Administrative Committee should ask for a correction procedure to be undertaken as soon as the amendments were deemed to be accepted (in principle on 1 October 2014).

### **2. Corrections to the current text of the Regulations annexed to ADN**

*Document:* ECE/TRANS/WP.15/AC.2/2014/31 (Secretariat)

*Informal documents:* INF.20 (Secretariat)  
INF.10/Rev.1 (Germany)  
INF.23 (Belgium)

25. The Safety Committee noted that differences between the different language versions had come to light in the course of preparations for the new version of ADN 2015 and that they needed to be corrected. It was therefore also suggested that the Administrative Committee should ask for an official correction procedure to be carried out (see annexes IV and V).

### **3. Transport of coal in bulk, special provision 803**

26. The Chairman noted that two proposals concerned special provision 803, but that as they dealt with different topics they would be discussed separately.

*Document:* ECE/TRANS/WP.15/AC.2/2014/50 (Germany)

27. The Committee adopted the proposed amendment to special provision 803 with some changes (see annex III) on the understanding that it would be necessary to clarify what was meant by appropriate measuring procedures. The Netherlands would draft an explanatory paper in collaboration with EURACOAL on what is meant by appropriate measuring procedures. The Chairperson noted that, pending its entry into force in 2017, the amendment could be implemented through multilateral agreements. A member of the Secretariat recalled that a multilateral agreement could contain only less stringent provisions and would not prevent the application of special provision 803 as set out on 1 January 2015.

*Informal document:* INF.21 (France)

28. The representative of France found it regrettable that the informal document and the preceding document had not been discussed at the same time, as his proposal constituted a different option which was also designed to increase safety during bulk carriage of coal that was liable to heat up or even ignite on its own. It was therefore regrettable that the detailed discussion of document ECE/TRANS/WP.15/AC.2/2014/50 had been held without taking into consideration the amendment to the proposal of Germany that he had put forward. Given the considerable time that it took to transport coal in bulk by inland waterways and the quantities transported, France considered that the conditions required for the carriage of



coal in bulk by sea, as set out in the IMO IMSBC Code, were also pertinent to carriage by inland waterways.

29. The representatives of EBU, EURACOAL and CIPA expressed grave concerns over that proposal, which would amount to requiring carriage to be in vessels equipped with hatch covers, with the hatches closed when the vessels were under way. They noted that 80% of the coal carried in bulk was transported in the open air on vessels without hatch covers and that the conditions proposed by France would not only have serious economic consequences if vessels had to be fitted with hatch covers but would also greatly affect operations because of hatch manoeuvres. The delegate of EURACOAL noted that in maritime transport the need to carry out atmospheric controls in airtight cargo holds containing coal was based on health and safety concerns.

30. It was noted that the RID/ADR/ADN Joint Meeting would also soon turn its attention to the issue of carriage of coal in bulk in wagons (ECE/TRANS/WP.15/AC.1/2014/47 (Poland)); the question therefore arose as to whether there was a need to consider a multimodal approach which took into account not only conditions that applied to maritime carriage but also to other modes of land transport (by road and rail) and, if necessary, the view of the United Nations Sub-Committee of Experts if it were requested to take up the issue.

31. Following a lengthy discussion, the representative of France requested that his proposal be put to a vote. The proposal was put to the vote and rejected. The Chairperson noted that it would be possible to go back over the issue, for example by following the conclusions of the discussion at the level of the RID/ADR/ADN Joint Meeting.

#### **4. Amendment to 8.1.2.6**

*Document:* ECE/TRANS/WP.15/AC.2/2014/27 (Austria)

32. The proposal to require the owner of the barge to keep the annex to the certificate of approval referred to in 1.16.1.4 when 8.1.2.6 was applied was adopted (see annex III).

#### **5. Definition of safe haven**

*Document:* ECE/TRANS/WP.15/AC.2/2014/32 (Recommended ADN classification societies)

33. To assist classification societies to establish rules for the certification of safe havens on board vessels, the Netherlands would organize a meeting of an informal group to discuss the scope of the issue. Recommended ADN classification societies were requested to specify at their next meeting precisely what issues they wished to have clarified.

#### **6. 8.6.3 ADN checklist (question 4)**

*Document:* ECE/TRANS/WP.15/AC.2/2014/34 (Germany)

*Informal document:* INF.8 (Germany)

34. The proposed amendment to question 4 was adopted (see annex III).

#### **7. 8.6.3 ADN checklist (consistency)**

*Informal document:* INF.14 (Netherlands)

35. The Safety Committee noted that the requirements mentioned in the checklist sometimes did not match up with any requirements in the Regulations. It accepted the offer of the Netherlands to explore the issue further and submit a proposal to introduce, if

necessary, requirements in the Regulations or at least to verify whether the relevant checklist questions should be retained.

**8. Additional entry in table C for UN No. 3257**

*Document:* ECE/TRANS/WP.15/AC.2/2014/38 (CEFIC)

36. The proposal was adopted (see annex III).

**9. Calculation software for loading**

*Document:* ECE/TRANS/WP.15/AC.2/2014/39 (EBU)

37. It was recalled that the transitional provision relating to 9.3.x.13.3 would expire on 31 December 2014. If vessels were not fitted with approved calculation software, a stability booklet would have to be used.

38. The Safety Committee noted the difficulties encountered by shipowners owing to the lack of certification criteria for such software on the part of classification societies, but found that it was up to the parties concerned to cooperate in order to make the use of the software possible. It invited EBU, recommended ADN classification societies and software companies to meet with one another as soon as possible so that the appropriate software could be certified.

**10. Use of submerged pumps**

*Document:* ECE/TRANS/WP.15/AC.2/2014/40 (EBU)

39. The proposal to allow, in 9.3.x.52 (b), permanently fixed submerged pumps with temperature monitoring of the “certified safe” type in double-hull spaces and double bottoms was adopted (see annex III).

**11. Danger caused by work on board**

*Document:* ECE/TRANS/WP.15/AC.2/2014/41 (EBU)

40. The Safety Committee considered that the document should be considered by the informal working group on degassing of cargo tanks.

**12. Proposal to amend 8.2.1.4**

*Document:* ECE/TRANS/WP.15/AC.2/2014/42 (France)

41. The proposal was adopted with some modifications. The amendments should also be applied to 8.2.1.6 and 8.2.1.8 (see annex III).

**13. ADN specialized knowledge certificate (8.2.2.8)**

*Document:* ECE/TRANS/WP.15/AC.2/2014/47 (Germany)

42. The Safety Committee agreed in principle with adding a new bullet point to 8.2.2.8 to mention the legal requirements concerning the procedure for issuing specialized knowledge certificates, but it was decided to mandate the informal working group on training to draft the text, taking 8.2.1.5 and 8.2.1.7 into account.

43. As to the second proposal, it was decided to delete the words “and advanced” in “Refresher and advanced training course” (see annex III).

**14. Inspection report prior to the issuance of the certificate of approval (1.16.3)**

*Document:* ECE/TRANS/WP.15/AC.2/2014/43 (France)

*Informal document:* INF.7 (Germany)

44. The Safety Committee agreed with France that the inspection procedure described in 1.16.3 required clarification, but decided that the matter should be considered in detail by a correspondence group led by the representative of France and with the participation of Austria, Germany, the Netherlands, Romania, Ukraine and the recommended ADN classification societies.

**15. Amendment to 9.3.x.8.1**

*Document:* ECE/TRANS/WP.15/AC.2/2014/44 (France)

*Informal document:* INF.7 (Germany)

45. Several delegations confirmed that the classification certificate was a document that concerned the compliance of the whole vessel's construction with the rules of the classification society. The issue should be looked at in detail by the correspondence group set up to consider the inspection procedure under 1.16.3.

**16. Requirements for the certificate of approval**

*Document:* ECE/TRANS/WP.15/AC.2/2014/45 (Germany, Austria and France)

46. The proposed modifications were adopted (see annex III).

**17. Clarification of some transitional provisions**

*Document:* ECE/TRANS/WP.15/AC.2/2014/46 (Recommended ADN classification societies)

47. The proposed editorial changes to the tables in 1.6.7.2.2.2 and 1.6.7.3 were adopted with some modifications (see annex III).

**18. Corrections concerning flame arresters**

*Document:* ECE/TRANS/WP.15/AC.2/2014/28 (CCNR)

48. The Committee adopted the proposed amendments and the additional corrections to 9.3.3.22.5 (b) and (c) (see annexes IV and V).

**19. Inconsistencies in table C**

*Informal document:* INF.2 (Belgium)

49. The Safety Committee noted that remarks 35 and 36 mentioned in 9.3.x.27.6 were in fact not assigned in column (20) of table C. It requested the working group on substances to look into the matter.

**20. Flexible bulk containers**

*Document:* ECE/TRANS/WP.15/AC.2/2014/48 (IDGCA)

*Informal document:* INF.6 (IDGCA)

50. The Chair said that it had now been established that the flexible bulk containers that IDGCA wished to allow did pass the performance tests in the UN Model Regulations and it

was therefore possible to permit their use for carriage on inland waterways, subject to conditions being established for their carriage by vessel.

51. A member of the secretariat pointed out that proposals for the conditions of carriage had already been drawn up by the RID/ADR/ADN Joint Meeting on the basis of the IMDG Code (see ECE/TRANS/WP.15/AC.1/132/Add.2). The Safety Committee agreed that those texts could be considered at the next session.

## **VI. Reports of informal working groups (agenda item 5)**

### **A. Report of the informal working group on explosion protection on tank vessels on its 5th and 6th meetings**

*Informal documents:* INF.15 and Add.1 (CCNR)  
INF.17 (Netherlands)

52. The Safety Committee noted with satisfaction that the informal working group had formulated proposals for handling cases of refrigerated containers (“reefers”) together with electrical equipment as the Committee had requested (ECE/TRANS/WP.15/AC.2/50, para. 74). It adopted the proposed amendments to 7.1.4.4.4 and 7.1.3.51.4 with some changes but, as the proposals were contained in an informal document, it requested the secretariat to submit the amended text at the next session as a working document for confirmation.

53. With regard to the second part of the report concerning explosion protection on tank vessels, the Safety Committee noted that the group continued to have doubts over the concepts to be applied to future provisions, including whether situations arising from external conditions, such as shoreside explosion risks or risks from vessels without explosion protection, should be taken into account.

54. The Committee pointed out that such risks should be taken into account and that any tank vessels transporting dangerous goods subject to ADN must maintain a minimum level of explosion protection for zone 2. The informal working group should determine the minimum requirements to be met by electrical equipment (for example, temperature class, explosion group), which should be duly reflected in table C.

55. The question which then must be considered was what additional requirements should be applied according to the actual risk of explosion posed by transported substances: level of protection appropriate to the transported substance (a more cost-effective but hardly practical solution, as vessels could not be modified every time a different substance was transported); level of protection related to the type of vessel (G, C or N) (while offering maximum safety by default, a very costly solution).

56. The Safety Committee decided that an intermediate concept should be applied, namely that the level of protection, if it should be higher than the minimum level for explosion protection provided for zone 2, would depend on the list of substances allowed for transport by tank vessel, i.e. the level to be provided for substances that posed the greatest risk of explosion in that list. Exceptions could be provided for in defined cases for equipment which could be replaced with ease when less dangerous substances were transported.

## **B. Report of the first meeting of the informal working group on degassing of cargo tanks**

*Informal document:* INF.18 (Netherlands)

57. The Safety Committee supported the principles proposed in the report of the working group regarding its further work. The group should submit a proposal indicating all the provisions of the Regulations that needed to be amended.

58. As to the differences in terminology between the language versions, the Safety Committee considered that the English term “gas-freeing” should be replaced by “degassing” as suggested in paragraph 7.2.4 of the document, as it was not a matter of eliminating all the gas in the tank but of ventilating it to eliminate the explosive atmosphere. It also confirmed the interpretation of paragraph 8 of INF.18 according to which a tank is considered to be degassed when the concentration of explosive vapours is less than 10% of the lower explosive limit for the substance concerned.

59. The Safety Committee thought that the group should also discuss who should verify the “degassed” status of a cargo tank.

## **VII. Programme of work and calendar of meetings (agenda item 6)**

60. The forthcoming sessions of the Committee would be held from 26 to 30 January 2015 and from 24 to 28 August 2015.

## **VIII. Any other business (agenda item 7)**

### **1. Corrections to vessel checklists**

*Informal document:* INF.5 (Secretariat)

61. The Safety Committee noted that the secretariat had received several proposals from CCNR and France for editorial improvements to the French version of the harmonized vessel checklists that had been adopted in August 2013 (see ECE/TRANS/WP.15/AC.2/48, paras. 43–45 and annexes IV and V) and published on the ECE website at the request of the Administrative Committee (see ECE/ADN/24, paras. 14–15).

62. Any delegations who had comments on other language versions were asked to transmit them to the ECE secretariat, which would draw up a proposed corrected version for the January 2016 session that could then be published for use with ADN 2017.

### **2. Request for consultative status from the European Skippers Organization (ESO)**

*Informal document:* INF.4 (ESO)

63. The Safety Committee decided to invite ESO to attend the next session to present its request for consultative status.

## **IX. Adoption of the report (agenda item 8)**

64. The Safety Committee adopted the report on its twenty-fifth session and the annexes on the basis of a draft prepared by the secretariat.

## **Annex I**

### **Proposed amendments to the Regulations annexed to ADN for entry into force on 1 January 2015**

(see ECE/ADN/27/Add.1 and ECE/ADN/27/Add.1/Corr.1)

## **Annex II**

### **Proposed corrections to the amendments to the Regulations annexed to ADN for entry into force on 1 January 2015**

(see ECE/ADN/27/Corr.1)

## Annex III

### Proposed amendments to the Regulations annexed to ADN for entry into force on 1 January 2017

#### Chapter 1.4

1.4.3.3 (v) Amend to read as follows:

"(v) When special provision 803 applies, shall guarantee and document, using an appropriate procedure, that the maximum permissible temperature of the cargo is not exceeded and shall provide instructions to the master in a traceable form."

(Reference document: ECE/TRANS/WP.15/AC.2/2014/50)

#### Chapter 1.6

1.6.7.1.2 (c) Insert the following text after "means that":

"when a vessel has benefitted from the transitional measure in paragraph (b)".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/46)

1.6.7.2.2.2 Amend the following entries in the table to read as follows:

Paragraphs	Subject	Time limit and comments
1.2.1	Hold spaces	N.R.M. for Type N open vessels whose hold spaces contain auxiliary appliances and which are carrying only substances of Class 8, with remark 30 in column (20) of Table C of Chapter 3.2. Renewal of the certificate of approval after 31 December 2038.
7.2.3.20.1	Fitting of ballast tanks and compartments with level indicators	N.R.M. for Type C and Type G tank vessels and Type N double hull tank vessels. Renewal of the certificate of approval after 31 December 2012.
7.2.3.20.1	Proof of stability in the event of a leak connected with ballast water	N.R.M. for Type G and Type N vessels. Renewal of the certificate of approval after 31 December 2044.
7.2.3.31.2	Motor vehicles only outside the cargo area	N.R.M. for Type N vessels. Renewal of the certificate of approval after 31 December 2034 Until then, the following requirement applies on board vessels in service: the vehicle shall not be started on board.
7.2.3.51.3	<i>Delete</i>	
7.2.4.22.3	Sampling from other openings	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2018 Until then, on board vessels in service, cargo tank covers may be opened during loading for control and sampling.
9.3.3.8.1	Continuation of class	N.R.M. for Type N open vessels with flame arresters and Type N open vessels. Renewal of the certificate of approval after 31 December 2044. Until then, the following requirements apply on board vessels in service: Except where otherwise provided, the type of construction, the strength, the subdivision, the equipment and the gear of the vessel shall conform or be equivalent to the construction requirements for classification in the highest class of a recognized classification society.



9.3.1.11.2 (a)	Arrangement of cargo tanks Distance between cargo tanks and side walls Height of saddles	N.R.M. for Type G vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2044.
9.3.3.11.4	Penetrations through the end bulkheads of hold spaces	N.R.M. from 1 January 2005 for Type N open vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2044.
9.3.3.11.6 (a)	Form of cofferdam arranged as a pump room	N.R.M for Type N vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2044.
9.3.3.11.8	Arrangement of service spaces located in the cargo area below deck	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2038.
9.3.3.12.7	Approval of flame arresters	N.R.M for Type N vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2018.
9.3.3.16.1	Internal combustion engine outside the cargo area	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.1.16.2 9.3.3.16.2	Hinges of doors facing the cargo area	N.R.M. for vessels whose keels were laid before 1 January 1977 where alterations would obstruct other major openings. Renewal of the certificate of approval after 31 December 2034.
9.3.3.16.2	Engine rooms accessible from the deck	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.1.17.1 9.3.3.17.1	Accommodation and wheelhouse outside the cargo area	N.R.M. for vessels whose keels were laid before 1 January 1977, provided that there is no connection between the wheelhouse and other enclosed spaces. Renewal of the certificate of approval after 31 December 2044. Renewal of the certificate of approval after 31 December 2044 for vessels up to 50 m in length whose keels were laid before 1 January 1977 and whose wheelhouses are located in the cargo area even if it provides access to another enclosed space, provided that safety is ensured by appropriate service requirements of the competent authority.
9.3.3.17.1	Accommodation and wheelhouse outside the cargo area	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2044.
9.3.1.17.2 9.3.2.17.2 9.3.3.17.2	Entrances facing the cargo area	N.R.M. for vessels up to 50 m in length whose keels were laid before 1 January 1977, provided that gas screens are installed. Renewal of the certificate of approval after 31 December 2044.
9.3.3.17.2	Entrances and openings	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2044.
9.3.3.17.3	<i>Delete</i>	
9.3.3.17.5 (b),(c)	Approval of shaft passages and displaying of instructions	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2018.

9.3.3.20.2	Filling of cofferdams with pump	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2018.
9.3.3.21.1 (b)	Liquid level gauge	N.R.M. from 1 January 2005 for vessels of Type N open with flame-arresters and those of Type N open. Renewal of the certificate of approval after 31 December 2018 Until then, on board vessels in service fitted with gauging openings, such openings shall: - be arranged so that the degree of filling can be measured using a sounding rod; - be fitted with an automatically-closing cover.
9.3.3.21.1 (g)	Sampling opening	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2018.
9.3.3.23.2	Test pressure for cargo tanks	N.R.M. for vessels whose keels were laid before 1 January 1977, for which a test pressure of 15 kPa (0.15 bar) is required. Renewal of the certificate of approval after 31 December 2044. Until then, a test pressure of 10 kPa (0.10 bar) shall be sufficient.
9.3.3.23.2	Test pressure for cargo tanks	N.R.M. for oil-separator vessels in service before 1 January 1999. Renewal of the certificate of approval after 31 December 2044. Until then, a test pressure of 5 kPa (0.05 bar) is sufficient.
9.3.3.23.3	Test pressure for piping for loading and unloading	N.R.M. for oil-separator vessels in service before 1 January 1999. Renewal of the certificate of approval at the latest by 1 January 2039. Until then, a test pressure of 400 kPa (4 bar) is sufficient.
9.3.3.42.2	Cargo heating system	N.R.M for Type N vessels. Renewal of the certificate of approval after 31 December 2034. Until then, the following requirements apply on board vessels in service: This can be achieved by one oil separator fitted to the condensed water return pipe.
9.3.3.52.1 (b), (c), (d) and (e)	Electrical installations	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.1.52.1 (e) 9.3.3.52.1 (e)	Electrical installations of the "certified safe" type in the cargo area	N.R.M. for vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2034. Until then, the following conditions shall be met during loading, unloading and gas freeing on board vessels having non-gastight wheelhouse openings (e.g. doors, windows, etc.) in the cargo area: (a) All electrical installations designed to be used shall be of a limited explosion-risk type, i.e. they shall be so designed that there is no sparking under normal operating conditions and the temperature of their outer surface does not rise above 200°C, or be of a type protected against water spray the temperature of whose outer surfaces does not exceed 200°C under normal operating conditions;

		(b) Electrical installations which do not meet the requirements of (a) above shall be marked in red and it shall be possible to switch them off by means of a central switch.
9.3.3.52.2	Accumulators located outside the cargo area	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.1.52.3 (a) 9.3.1.52.3 (b) 9.3.3.52.3 (a) 9.3.3.52.3 (b)	Electrical installations used during loading, unloading or gas-freeing	N.R.M. for vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2034 for the following installations: - Lighting installations in accommodation, with the exception of switches near the entrances to accommodation; - Radio telephone installations in accommodation and wheelhouses and combustion engine control appliances. Until then, all other electrical installations shall meet the following requirements: a) Generators, engine, etc. IP 13 protection mode; b) Control panels, lamps, etc. IP 23 protection mode; c) Appliances, etc. IP 55 protection mode.
9.3.3.52.3 (a) 9.3.3.52.3 (b)	Electrical installations used during loading, unloading or gas-freeing	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.3.52.4	Red mark on electrical installations	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.3.52.5	Shutting down switch for continuously driven generator	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.3.52.6	Permanently fitted sockets	N.R.M. for Type N open vessels. Renewal of the certificate of approval after 31 December 2034.
9.3.1.56.1 9.3.3.56.1	Metallic sheaths for all cables in the cargo area	N.R.M. for vessels whose keels were laid before 1 January 1977. Renewal of the certificate of approval after 31 December 2034.

1.6.7.3 Amend the entry for 9.3.3.8.1 to read as follows:

Paragraph	Subject	Time limit and comments
9.3.3.8.1	Classification	N.R.M. for Type N open vessels with flame arresters and Type N open vessels. Renewal of the certificate of approval after 31 December 2044.

(Reference document: ECE/TRANS/WP.15/AC.2/2014/46)

## Chapter 1.16

1.16.1.2.1 Amend to read as follows:

"1.16.1.2.1 The certificate of approval shall conform to the model 8.6.1.1 or 8.6.1.3 with regard to content, form and layout and include the required particulars, as appropriate. It shall include the date of expiry of the period of validity.

Its dimensions are 210 mm x 297 mm (A4). Front and back pages may be used.

It shall be drawn up in the language or one of the languages of the issuing country. If this language is not English, French or German, the title of the certificate and each entry under items 5, 9 and 10 in the certificate of approval for dry cargo vessels (8.6.1.1) and under items 12, 16 and 17 in the certificate of approval for tank vessels (8.6.1.3) shall also be provided in English, French or German."

1.16.1.3.2 Insert the following text after "model in 8.6.1.2 or 8.6.1.4": "with regard to content, form and layout" and the following text at the end:

"Its dimensions are 210 mm x 297 mm (A4). Front and back pages may be used.

It shall be drawn up in the language or one of the languages of the issuing country. If this language is not English, French or German, the title of the certificate and each entry under item 5 in the provisional certificate of approval for dry cargo vessels (8.6.1.2) and under item 12 in the provisional certificate of approval for tank vessels (8.6.1.4) shall also be provided in English, French or German."

(Reference document: ECE/TRANS/WP.15/AC.2/2014/45)

### Chapter 3.2

3.2.3.2, table C Add the following new entry for UN No. 3257:

UN No. or substance identification No.	(1)	3257
Name and description	(2)	ELEVATED TEMPERATURE LIQUID, N.O.S. at above 100°C and below its flash-point (including molten metals, molten salts, etc.)
Class	(3a)	9
Classification code	(3b)	M9
Packing group	(4)	III
Dangers	(5)	9+(N1, N2, N3, CMR, F or S)
Type of tank vessel	(6)	*
Cargo tank design	(7)	*
Cargo tank type	(8)	*
Cargo tank equipment	(9)	*
Opening pressure of the high-velocity vent valve in kPa	(10)	*
Maximum degree of filling in %	(11)	95
Relative density at 20°C	(12)	
Type of sampling device	(13)	*
Pump room below deck permitted	(14)	yes
Temperature class	(15)	
Explosion group	(16)	

Anti-explosion protection required	(17)	no
Equipment required	(18)	*
Number of cones/ blue lights	(19)	0
Additional requirements /Remarks	(20)	7; 20:+250°C; 22; 24; 27 *see 3.2 3.3

(Reference document: ECE/TRANS/WP.15/AC.2/2014/38)

### Chapter 3.3

3.3.1, Special provision 803 Amend to read as follows:

"803 Hard coal, coke and anthracite, when carried in bulk, are not subject to the provisions of ADN if:

- (a) The temperature of the cargo has been determined using an appropriate procedure and is not higher than 60°C before, during or immediately after loading of the hold;
- (b) Depending on the temperature of the cargo before, during and immediately after loading of the hold, the expected duration of carriage without temperature monitoring does not exceed the maximum journey times shown in the table below:

Maximum temperature on loading (°C)	Maximum duration of journey (days)
60	10
50	18
40	32
30	57

- (c) Where the effective duration of carriage exceeds the maximum duration shown in subparagraph (b), temperature monitoring is carried out from the first day over the maximum;
- (d) The master is given, at the time of loading and in a traceable form, instructions on how to proceed if there is a significant heating of the cargo."

(Reference document: ECE/TRANS/WP.15/AC.2/2014/50)

### Chapter 7.1

7.1.2.19.1, second paragraph In the list of paragraphs, insert "1.16.1.1, 1.16.1.2, 1.16.1.3," at the beginning and delete "8.1.8, 8.1.9,".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/45)

### Chapter 7.2

7.2.2.19.1 In the list of paragraphs, insert "1.16.1.1, 1.16.1.2, 1.16.1.3," at the beginning and delete "8.1.8, 8.1.9,".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/45)

### Chapter 8.1

8.1.2.1 (a) Amend to read as follows:

"(a) The vessel's certificate of approval referred to in 1.16.1.1 or the vessel's provisional certificate of approval referred to in 1.16.1.3 and the annex referred to in 1.16.1.4;"

(Reference document: ECE/TRANS/WP.15/AC.2/2014/45)

8.1.2.6, second sentence Insert the following text before "in his possession":

"and the annex covered by 1.16.1.4".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/27)

8.1.8 and 8.1.9 Delete and replace by "(Deleted)".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/45)

## **Chapter 8.2**

8.2.1.4 Modify the beginning of the first sentence to read as follows:

"After five years, the certificate shall be renewed by the competent authority or by a body recognized by it if the expert furnishes proof of ...".

8.2.1.6 Modify the beginning of the first sentence to read as follows:

"After five years, the certificate shall be renewed by the competent authority or by a body recognized by it if the expert on the carriage of gases furnishes proof that ...".

8.2.1.8 Modify the beginning of the first sentence to read as follows:

"After five years, the certificate shall be renewed by the competent authority or by a body recognized by it if the expert on the carriage of chemicals furnishes proof that ...".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/42)

8.2.2.1, 8.2.2.3.4, 8.2.2.5, 8.2.2.6.6, 8.2.2.8 Replace "refresher and advanced course" by "refresher course".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/47)

## **Chapter 8.6**

8.6.1.3 and 8.6.1.4, page 3 of the models Amend the entry for "Opening pressure of the high-velocity vent valve in kPa" to read as follows:

"Opening pressure of the high-velocity vent valve/safety valve in kPa"

(Reference document: ECE/TRANS/WP.15/AC.2/2014/45)

8.6.3, question 4 Amend to read as follows.

"Have suitable means in accordance with 7.2.4.77 been provided for leaving the vessel, including in cases of emergency?"

(Reference documents: ECE/TRANS/WP.15/AC.2/2014/34 and Informal document INF.8)

## **Chapter 9.3**

9.3.x.52.1 (b) Add the following text at the end:

"The following equipment may be installed only in double-hull spaces and double bottoms if used for ballasting:

- Permanently fixed submerged pumps with temperature monitoring, of the certified safe type."

9.3.x.52.1 (c), third indent Insert "with temperature monitoring" after "ballast pumps".

(Reference document: ECE/TRANS/WP.15/AC.2/2014/40)

## Annex IV

### Proposed corrections to the Regulations annexed to ADN

#### Corrections to the official text (requiring acceptance by Contracting Parties)

- 1.2.1, definition of aerosol or aerosol dispenser      *For* 6.2.6 of ADR or RID *read* 6.2.6 of ADR
- 1.6.7.2.2.2, entry for 1.2.1, flame arrester, column 3 "time limits and comments" Replace "Flame arresters shall be of a type approved by the competent authority for the use prescribed." by "Flame arresters shall conform to the standard EN 12874:1999 on board vessels built or modified from 1 January 2001 or if they have been replaced from 1 January 2001. In other cases, they shall be of a type approved by the competent authority for the use prescribed."
- 1.16.1.2.5, fourth paragraph      Not applicable to the English version.
- 2.2.1.3, entry for 1.4C      Not applicable to the English version
- 2.2.61.3, footnote i      *For* packaging, container or cargo transport unit *read* packaging or cargo transport unit
- 2.3.3.2, footnote 1      Not applicable to the English version.
- 3.2.1, column 7( a)      Not applicable to the English version.
- 3.2.1, Table A, UN No. 1408, FERROSILICON      In column (6), replace "802" by "801".
- 3.2.3.1, column 20 (a)      Not applicable to the English version.
- 3.2.3.1, column 20 (a).1      Not applicable to the English version.
- 3.2.3.1, column 20 11 (f)      Not applicable to the English version.
- 3.2.4.3, J      Insert a footnote after "of GHS" (twice) to read as follows:  
 "\*"      Since there is no official international list of CMR substances of Categories 1A and 1B, pending the availability of such a list, the list of CMR substances of Categories 1 and 2 in Directives 67/548/EEC and 88/379/EEC of the Council of the European Union, as amended, shall apply."
- 3.3.1, Special Provision 204      *Insert* 204      (*Deleted*)
- 3.3.1, Special Provision 251, third paragraph      Not applicable to the English version.
- 3.3.1, Special Provision 335, second sentence      Not applicable to the English version.
- 3.5.1.4      Not applicable to the English version
- 5.4.3.1      Not applicable to the English version
- 5.4.3.4      Not applicable to the English version
- 7.1.4.3.3      Not applicable to the English version
- 7.1.4.10.1      Not applicable to the English version
- 7.2.3.25.3      Not applicable to the English version
- 7.2.4.16.8      Not applicable to the English version.

- 7.2.4.22.2 Not applicable to the English version.
- 7.2.4.22.5 Not applicable to the English version.
- 7.2.4.28.3 Not applicable to the English version
- 7.2.4.28.3 Not applicable to the English version
- 8.3.5 Not applicable to the English version
- 9.1.0.40.2.9 (f) Replace "inspection certificate" by "vessel certificate".
- 9.3.1.40.2.9 (f) Replace "inspection certificate" by "vessel certificate".
- 9.3.2.40.2.9 (f) Replace "inspection certificate" by "vessel certificate".
- 9.3.2.74.1 Not applicable to the English version
- 9.3.3.21.9 Replace "Screens" by "A flame arrester plate stack" and "are not required" by "is not required".
- 9.3.3.22.5 (a) Not applicable to the English version
- 9.3.3.22.5 (a) (i) Not applicable to the English version.
- 9.3.3.22.5 (a) (ii) Not applicable to the English version.
- 9.3.3.22.5 (a) (iii) Not applicable to the English version.
- 9.3.3.22.5 (a) (iv) Not applicable to the English version.
- 9.3.3.22.5 (a) (v) Not applicable to the English version.
- 9.3.3.22.5 (b) Insert the following text after "detonation/deflagration":  
"so that any gas released is removed by the venting piping".
- 9.3.3.40.2.9 (f) Replace "inspection certificate" by "vessel certificate".



## Annex V

### Proposed corrections to the Regulations annexed to ADN

#### Corrections to the publication (ECE/TRANS/231) (not requiring acceptance by Contracting Parties)

##### Volume I

- Page 8, 1.1.3.6.1 (a) (iv) *For Group A read Category A*
- Page 10, 1.1.4.2.1 (a) *For ADR read ADN*
- Page 22, 1.2.1, definition of demountable tank *Insert the following text at the end: "or a tank designed to fit the special apparatus of a wagon but which can only be removed from it after dismantling the means of attachment;"*
- Page 64, 1.6.7.2.2.2, entry for 7.2.3.31.2 *For Type N read Type N open*
- Page 67, 1.6.7.2.2.2, entry for 9.3.3.11.7, Width of double hull *For 2010 read 2007*
- Page 74, 1.6.7.2.2.2, entry for 9.3.3.42.2 *For Type N read Type N open*
- Page 118, 1.15.3, in the title *For recognition under this Agreement read recognition*
- Page 136, 3.2.3.1, column 19 *For dangerous substance or article read dangerous substance*
- Page 144, 3.2.3.1, column (20) 24 *For above 61°C read above 60°C*
- Page 145, 3.2.3.1, column (20) 29 *For 174 kPa read 175 kPa*
- Page 146, 3.2.3.1, column (20) 32 (b) *For spaces read hold spaces*
- Page 291, 6.1.4 *For removable tanks read demountable tanks*
- Page 304, 7.1.4.4.3 *For 2.4m read 2.40m*
- Page 312, 7.1.4.14.7.5.1 *For the vehicle, the wagon read the vehicle, the wagon, the vessel*
- Page 327, 7.2.3.15, last paragraph *For type C vessel read type C tank vessel*
- Page 329, 7.2.3.32 *For 0.6m read 0.60m*
- Page 418, 9.3.1.17.3 *For loading and unloading read loading, unloading and degassing*
- Page 449, 9.3.2.17.3 *For loading and unloading read loading, unloading and degassing*
- Page 482, 9.3.3.17.3 *For loading and unloading read loading, unloading and degassing*
- Page 489, 9.3.3.22.5 (c) *Replace "pressure/vacuum" by "vacuum".*

##### Volume II

- Page 408, 3.3.1, Special Provisions 358 and 359 *Insert "of ADR" after "4.1.4.1"*
- Page 63, 2.2.41.1.12 *For carriage in tanks according to Chapter 4.2 of ADR read carriage in portable tanks*
- Page 197, 3.1.2.8.1.4, in the example *Delete or PETROLEUM PRODUCTS, N.O.S.*